

REMARKS

Claims 48-78 are at issue in this application. Claims 48, 49, 54-58, 63-70, and 75-78 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Burke et al. (U.S. Patent 6,805,523, hereinafter "Burke"). Claims 50-53 and 59-62 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Burke in view of Metz et al. (U.S. Patent 5,586,355, hereinafter "Metz"). Claims 71-74 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Burke in view of Robinson (U.S. Patent 4,127,295, hereinafter "Robinson"). Applicants respectfully request reconsideration and allowance of rejected claims 48-78.

Claim Rejections under 35 USC § 102

As noted above, claims 48, 49, 54-58, 63-70, and 75-78 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Burke. Of those claims, claims 48, 56, 67, and 78 are independent claims and will each be discussed in greater detail below, but for introductory purposes the claims as they relate to Burke will be discussed as a group.

In general, the independent claims are directed to a bumper for preventing a moving vehicle from contacting a loading dock or loading dock equipment. Claims 48 and 56 have been amended to clarify that the second contact surface stops the vehicle movement at a position indicative that the vehicle is in an undesirable position relative to the loading dock. In particular, independent claims 48, 56, and 78 generally recite a first contact surface disposed for contact by a vehicle to stop vehicle movement, and a second contact surface disposed for contact by the vehicle to stop the vehicle movement when the vehicle is in an undesirable position relative to the loading dock. Meanwhile, independent claim 67 generally recites a first contact surface disposed to stop vehicle movement toward a loading dock, and a guide member for guiding a vehicle that is off-center relative to the loading dock.

In either case, the contact surfaces are disposed for contact by a moving vehicle, and additionally provide an indication that the vehicle is in an undesirable position relative the loading dock.

Burke fails to teach or suggest a bumper having a first and second contact surface disposed for contact by a moving vehicle, and fails to teach or suggest a bumper for indicating that the vehicle is in an undesirable position relative to a loading dock. Additionally, Burke fails to teach or suggest a guide member for guiding a vehicle that is off-center relative to the loading dock toward a centered position.

In contrast, while the Office action suggests that Burke discloses a bumper for stopping a vehicle (as shown in Figure 4), wherein the bumper has a first contact surface (46), a second contact surface (53) spaced further outward than the first contact surface, and a guide member (40) spaced below the first contact surface, the applicants respectfully traverse the characterization of Burke for several reasons.

First, the bumper disclosed by Burke is not intended to stop a vehicle or prevent a vehicle moving toward a loading dock from contacting that loading dock as required by the claims. Burke does not suggest that its “sidewall panel bumper guard” could be used on a loading dock, instead intending the bumper for use in auto rack railroad cars to eliminate contact between the door of a vehicle loaded in the car and the sidewall panel of the car (col. 2, lines 55-57). Burke also states that “[t]he contact member has a lesser thickness than the arms to absorb the forces of the vehicle door” when it is opened (col. 2, lines 62-64, emphasis added). The underlined portion of the previous quotation clearly states that the Burke bumper, with its thinner contact member, is intended to absorb the impact of a vehicle door. One could not reasonably expect the Burke bumper to stop a moving vehicle.

A bumper designed solely to absorb the impact of a vehicle door as it is opened, would almost certainly collapse under the impact of a moving truck, thus rendering it entirely ineffective at solving the problem addressed by the current invention.

Second, Burke does not disclose a bumper with multiple surfaces intended to be contacted by a vehicle. As quoted above, Burke's "contact member has a lesser thickness than the arms to absorb the forces of the vehicle door" (col. 2, lines 62-64, emphasis added). This reference to a singular contact member implies that Burke's bumper has only one surface intended to be contacted. The Burke specification is replete with similar references to a singular contact section, or member (e.g., "the bumper guard includes a first mounting base 42a, a second mounting base 42b, a first extension arm 50a, a second extension arm 50b and a contact section 52" (col. 5, lines 43-46), "[i]n this mounting method when a vehicle . . . contacts the contact section 52" (col. 5, lines 49-51)). Further, the feature that the Office action alleges is the first contact surface (46) is actually "any suitable fastener . . . used to attach the bumper guard to the sidewall panel" (col. 4, lines 41-43). It is extremely unlikely that Burke intended for the vehicle door to contact fastener 46 as such contact would likely result in damage to the vehicle door (scratches, dents, dings) - the very damage that Burke is trying to avoid. Thus, fastener 46 cannot fairly be interpreted as a first contact surface, leaving contact section 52 as the only contact surface in the Burke bumper.

Finally, Burke does not disclose a bumper for preventing a vehicle from contacting a loading dock, nor does it disclose a bumper with a guide member for guiding a vehicle that is off-center relative to the loading dock toward a centered position in which the vehicle contacts the first contact surface.

For at least the foregoing reasons, the Burke patent does not teach each and every element of the novel subject matter set forth in claims 48, 49, 54-58, 63-70, and 75-78, as is required for anticipation under § 102, leaving these claims in a condition for immediate allowance.

With that by way of background, individual groupings of the claims rejected under §102 will now be demonstrated to define over Burke.

Claims 48, 49, 54, and 55 are Allowable:

Independent claim 48 recites a bumper for preventing a vehicle from contacting a loading dock, the bumper comprising a first contact surface disposed to be contacted by the vehicle to stop vehicle movement toward the loading dock, wherein the first contact surface is spaced outward from the loading dock in a direction opposite the direction of vehicle movement. The bumper further comprises a second contact surface also disposed to be contacted by the vehicle to stop vehicle movement toward the loading dock, wherein the second contact surface is spaced further outward from the loading dock than the first contact surface in a direction opposite the direction of vehicle movement. Vehicle contact with the second contact surface causes the vehicle to stop at a position indicative of an undesirable location relative to the loading dock.

As discussed in detail above, Burke does not disclose a bumper for preventing a vehicle from contacting a loading dock, nor does it disclose a bumper with two contact surfaces to be contacted by a vehicle to stop vehicle movement. Finally, the bumper disclosed in Burke does nothing to solve the problem that the current invention addresses - a vehicle backing up to the loading dock with the rear of the vehicle improperly positioned relative to the loading dock's doorway, dock leveler, vehicle restraint, dock seal, or dock shelter.

The invention, as now more clearly claimed in amended, independent claim 48 solves this problem by locating the second contact surface so that it stops the vehicle in a position that indicates an undesirable location relative to the loading dock. Therefore, independent claim 48 and claims 49, 54, and 55, which depend therefrom, are in a condition for allowance.

Claims 56-58 and 63-66 are Allowable:

Independent claim 56 recites a bumper system for preventing a vehicle from contacting a loading dock, the bumper system comprising a first bumper and a second bumper, wherein the bumpers are spaced laterally in a direction perpendicular to vehicle movement. Each of the bumpers comprises a first contact surface and a second contact surface, both disposed to be contacted by the vehicle to stop vehicle movement toward the loading dock. The first contact surface is spaced outward from the loading dock in a direction opposite the direction of vehicle movement, while the second contact surface is spaced further outward from the loading dock than the first contact surface in a direction opposite the direction of vehicle movement. Vehicle contact with the second contact surface causes the vehicle to stop at a position indicative of an undesirable location relative to the loading dock.

As discussed in detail above, Burke does not disclose a first and a second bumper laterally spaced on a loading dock for preventing a vehicle from contacting the dock. Nor does Burke disclose a first and a second bumper, each with two contact surfaces to be contacted by a vehicle to stop vehicle movement. Finally, the bumper disclosed in Burke does nothing to solve the problem that the current invention addresses - a vehicle backing up to the loading dock with the rear of the vehicle improperly positioned relative to the loading dock's doorway, dock leveler, vehicle restraint, dock seal, or dock shelter.

The invention, as now more clearly claimed in amended, independent claim 56 solves this problem by locating the second contact surface so that it stops the vehicle in a position that indicates an undesirable location relative to the loading dock. Therefore, independent claim 56 and claims 57, 58, and 63-66, which depend therefrom, are in a condition for allowance.

Claims 67-70 and 75-77 are Allowable:

Independent claim 67 recites a bumper for preventing a vehicle from contacting a loading dock, the bumper comprising a first contact surface disposed to be contacted by the vehicle to stop vehicle movement toward the loading dock, wherein the first contact surface is spaced outward from the loading dock in a direction opposite the direction of vehicle movement. The bumper further comprises a guide member for guiding a vehicle that is off-center relative to the loading dock toward a centered position in which the vehicle contacts the first contact surface.

As discussed in detail above, Burke does not disclose a bumper for preventing a vehicle from contacting a loading dock, nor does it disclose a bumper with a guide member for guiding a vehicle that is off-center relative to the loading dock toward a centered position in which the vehicle contacts the first contact surface. The Office action suggests that Burke's feature 40 acts as the guide member claimed here, but 40 actually references the overall bumper guard (see line 31 et seq.). Even features 50a and 50b (two parallel extension arms) cannot fairly be said to correspond to the guide member claimed here, because they are not adapted to guide a vehicle toward a centered position in which the vehicle contacts a first contact surface (Burke's 52). The geometry of the Burke bumper simply does not allow the extension arms to act as guides, as a vehicle door would never directly contact them.

Finally, as noted above, the bumper disclosed in Burke does nothing to solve the problem that the current invention addresses - a vehicle backing up to the loading dock with the rear of the vehicle improperly positioned relative to the loading dock's doorway, dock leveler, vehicle restraint, dock seal, or dock shelter. Therefore, independent claim 67 and claims 68-70, and 75-77, which depend therefrom, are in a condition for allowance.

Claim 78 is Allowable:

Independent claim 78 recites a method of preventing a vehicle parking at a loading dock from parking at an off-center position relative to the loading dock, wherein the vehicle must be within a specified distance from the loading dock to be accessible from the loading dock. The method comprises a first step of providing a bumper system with a first stop position for the vehicle at a first distance outward from the loading dock, and a second stop position for the vehicle at a second, greater distance outward from the loading dock, wherein the second distance is beyond the specified distance. A second step of the method comprises spacing the first stop position and the second stop position laterally relative to the loading dock, so that an off-center vehicle is stopped by the bumper system at the second stop position, and a centered vehicle is stopped by the bumper system at the first stop position.

Burke does not disclose a method of preventing a vehicle parking at a loading dock from parking at an off-center position relative to the loading dock. Nor does Burke disclose a method of using a bumper system with two separate stop positions spaced at different distances outward from the loading dock, wherein the stop positions are spaced laterally so that an off-center vehicle is stopped by the bumper system at the second stop position and a centered vehicle is stopped by the bumper system at the first stop position. As noted above, Burke only discloses a bumper with one surface designed to stop/absorb the impact of a vehicle door as it is opened and even this surface would not stop a moving vehicle.

Finally, the bumper disclosed in Burke does nothing to solve the specific problem that the method of claim 78 addresses - a vehicle backing up to the loading dock with the rear of the vehicle improperly positioned relative to the loading dock's doorway, dock leveler, vehicle restraint, dock seal, or dock shelter. Therefore, independent claim 78 is in a condition for allowance.

Claim Rejections under 35 USC § 103

Claims 50-53 and 59-62 are Allowable:

Claims 50-53 and 59-62 stand rejected under § 103(a) as being unpatentable over Burke in view of Metz. Claims 50-53 and 59-62 are all dependent claims that relate, *inter alia*, to a sensor that is responsive to the position of a vehicle relative to the bumper. The Office action concedes that Burke does not disclose such a sensor, but suggests that Metz discloses a sensor for mounting on the underside of a loading dock leveler. The Office action further asserts that it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the sensor of Metz to Burke's bumper to warn of an impending collision.

The § 103(a) rejection of claims 50-53 and 59-62 is respectfully traversed because, *inter alia*, there is no teaching or suggestion to combine or modify the references to produce the claimed invention (MPEP § 2143.01). Furthermore, as discussed below, even if the references were combined, the claimed invention would not result.

The deficiencies of Burke have been detailed above and apply with equal weight to the dependent claims at issue here. Burke still does not disclose a bumper for preventing a vehicle from contacting a loading dock, nor does it disclose a bumper with two contact surfaces to be contacted separately by a vehicle to stop vehicle movement.

Finally, the bumper disclosed in Burke still does nothing to solve the problem that the current invention addresses - a vehicle backing up to the loading dock with the rear of the vehicle improperly positioned relative to the loading dock's doorway, dock leveler, vehicle restraint, dock seal, or dock shelter.

The sensor of Metz does nothing to cure these deficiencies. Metz discloses a sensor mounted to the underside of vertically storing dock leveler for delivering an output signal that ceases downward movement of the leveler when a person, or other foreign object, is sensed below it (Metz's Abstract). Metz demonstrates no appreciation of the issues addressed by the current invention - sensing the location of a vehicle to indicate its position relative to a driveway or loading dock (i.e., sensing when the vehicle is in an undesirable position). Thus, there is no suggestion in either of these references that would lead one of ordinary skill in the art to combine a bumper for use on the interior of railroad car walls with a safety sensor for use on the bottom of a dock leveler to produce the invention claimed in 50-53 and 59-62. Further, even if the references were combined, the claimed invention would not result.

In light of the foregoing, withdrawal of the § 103(a) rejection of claims 50-53 and 59-62 is respectfully requested.

Claims 71-74 are Allowable:

Claims 71-74 stand rejected under § 103(a) as being unpatentable over Burke in view of Robinson. Claim 71 depends from independent claim 67 (discussed above) and further recites that the guide member is an active guide mechanism that, when contacted by an off-center vehicle, translates the vehicle toward a centered position in which the vehicle contacts the first contact surface. Claims 72-74 all depend from claim 71 and more narrowly claim the active guide member.

The Office action concedes that Burke does not disclose a guide member with an active guiding mechanism, but suggests that Robinson discloses a bumper system with an active member (26) that is capable of guiding. The Office action further asserts that it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the alleged active guide of Robinson to Burke's bumper to prevent scuffing and denting of the bumper and vehicle.

The § 103(a) rejection of claims 71-74 is respectfully traversed because, *inter alia*, there is no teaching or suggestion to combine or modify the references to produce the claimed invention (MPEP § 2143.01). Furthermore, as following discussion will show, even if the references were combined, the claimed invention would not result.

The deficiencies of Burke have been detailed above and apply to the dependent claims at issue here, as well. Burke still does not disclose a bumper for preventing a vehicle from contacting a loading dock, nor does it disclose a bumper with a guide member for guiding a vehicle that is off-center relative to the loading dock toward a centered position in which the vehicle contacts the first contact surface. The Office action suggests that Burke's feature 40 acts as the guide member claimed here, but 40 actually references the overall bumper guard (see line 31 et seq.). Even features 50a and 50b (two parallel extension arms) cannot fairly be said to correspond to the guide member claimed here, because they are not adapted to guide a vehicle toward a centered position in which the vehicle contacts a first contact surface (Burke's 52). The geometry of the Burke bumper simply does not allow the extension arms to act as guides, as a vehicle door would never directly contact them.

Finally, as noted several times above, the bumper disclosed in Burke does nothing to solve the problem that the current invention addresses - a vehicle backing up to the loading dock with the rear of the vehicle improperly positioned relative to the loading dock's doorway, dock leveler, vehicle restraint, dock seal, or dock shelter.

The truck bumper and cable winch unit disclosed by Robinson does nothing to cure the deficiencies of Burke. Feature 26 of Robinson, which the Office action alleges is an active member capable of guiding, is actually "a vertical-axis, direction-changing sheave" (col. 3, lines 2-3).

As described in claim 1, the "vertical-axis sheaves [are] journaled on the ends of the bumper and . . . positioned to receive said laterally-running working reach of the cable and turn such reach to run rearwardly, from said corresponding end of the bumper, alongside the truck" (col. 4, lines 37-42). In plain English, the sheave 26 is a wheel with a grooved rim in which the cable runs (like a sheave in any common pulley) that rotates about a vertical axis to allow the winch cable to change directions from a direction parallel the front of the truck to a direction perpendicular the front of the truck. As such, the sheave of Robinson does not act as an active guide for the bumper but as a guide for a winch cable.

Thus, there is no suggestion in either Burke or Robinson that would lead one of ordinary skill in the art to combine a bumper for use on the interior of railroad car walls with a sheave used in a truck winch assembly to produce the invention claimed in 71-74, which calls for not just the combination of two separate structures (a bumper and a guide), but also for a beneficial operative interaction between the two. This beneficial operative interaction is not even hinted at in either reference, alone or in combination, suggesting that, even if the references were combined, the claimed invention would not result. In light of the foregoing, withdrawal of the § 103(a) rejection of claims 71-74 is respectfully requested.


Conclusion

Reconsideration of the application and allowance thereof are respectfully requested.
If there is any matter that the examiner would like to discuss, the examiner is invited to
contact the undersigned representative at the telephone number set forth below.

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